January 2022

POLICY BRIEF

Taxing Business Incomes: Evidence from the Survey of Consumer Finances

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This policy brief and associated report are available online at: https://www.brookings.edu/research/taxing-business-incomes-evidence-from-the-survey-of-consumer-finances/

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Acknowledgements

In this policy brief, we explore the tax implications of the fact that most of the economic income generated by closely held businesses (that is, businesses other than corporations) in the United States does not show up on tax forms. Understanding the sources of this discrepancy—including tax laws, non-compliance, or differences in reporting of business losses—can have first-order implications for measuring and interpreting trends in the distribution of income and wealth. For example, determining the distribution of "missing" business income plays an important role in estimates of how top income shares have evolved over time (Auten and Splinter 2019; Kopczuk and Zwick 2020; Piketty, Saez, and Zucman 2018; Sabelhaus and Park 2020). Likewise, to the extent that the distribution of wealth is inferred by capitalizing income flows that appear on tax forms, the difference between economic income and tax-based income definitions could bias the results (Bricker et al. 2016; Saez and Zucman 2016; Smith, Zidar, and Zwick 2021).

Using aggregate data and household survey information, we examine the difference between alternative measures of reported closely held business income and discuss the implications for the distribution of income, taxes, and wealth.

How much business income shows up on tax forms?

We begin by comparing measures of economic income in the National Income and Product Accounts (NIPA) with those in tax data published by the IRS Statistics of Income (SOI). We divide income into three categories: closely held businesses, financial income (such as interest and dividends), and "other income" (wages, pensions, and government benefits) and make several adjustments to ensure that the data from different sources represent similar concepts. It is worth noting here that our disaggregation of incomes into three categories is not built around the theoretical concepts of "labor" and "capital" incomes familiar to most economists. Much of what we categorize here as business income is certainly a return to labor effort, not capital income, as highlighted by Smith et al. (2019), Kopczuk and Zwick (2020), and others. Our focus in this paper is on the tax treatment of different types of income from a legal perspective. We are concerned with how certain types of incomes do or do not show up on tax returns, and the effective rates at which those incomes are taxed if they do show up.

We focus on tax years from 1994 to 2018. Tax year 1994 (survey and filing year 1995) is the first year covered by our SCF data (discussed in the next section). Tax year 2018 corresponds to the last year of our SCF data set (survey and filing year 2019) and is also the last year of published SOI tax data.

Figure 1 shows that—after making conceptual corrections to align the NIPA and SOI income concepts discussed above—the fraction of NIPA income that shows up as SOI income varies by type of income and over time. The blue line shows that the ratio of SOI to NIPA measures of "other" income has been high and relatively constant, at 86 percent in 1994 and 84 percent in 2018, with most of the decline occurring in the last few years of the sample period. In contrast, the ratio of SOI to NIPA measures of income from closely held businesses and financial income is lower and has declined over time. The solid green line in Figure 1 shows that the ratio was 44 percent in 1994 and declined to 32 percent by 2018. That is, the United States has shifted from taxing less than half of economic measures of business and financial income to taxing less than a third of such incomes over that period. The green dashed line shows that removing the adjustments for qualified dividends and QBI leaves the ratio at 44 percent in 1994 and 40 percent in 2018.

One notable aspect of the data is the substantial magnitude of reported businesses in the SOI data. The NIPA economic concept of business income is, by definition, a net number aggregated across all closely held businesses. The SOI business income concepts are reported separately for sole proprietorships, partnerships and S-corps, and rental income, and within each category of income, the SOI reports positive and negative separately entries, which makes it possible to construct measures of gross, negative, and net business incomes (Figure 2).

Business losses play an important role in SOI net business income. For example, in 2018, gross business incomes—the sum of only positive business incomes reported to the IRS—were about 77 percent of the

NIPA economic measure (Figure 2, black line). Business losses—the sum of negative business incomes in the SOI—were about 33 percent of net NIPA business income (Figure 2, red line). The net effect is that only 44 percent of NIPA business income showed up in the net SOI business income measure, and depending on one's reference point, the ratio is either stable or declining over time.

SOI business losses have increased steadily over our entire sample period, and there is little or no correlation with actual business cycle conditions. In 2018, the ratio of SOI business losses to NIPA net business income was higher than in the mid-1990s and rising—even though the economy had been expanding (and in principle making more firms profitable) for several years.

Data and tax calculator using the Survey of Consumer Finances

The large and growing divergence between NIPA measures of economic income and SOI measures of income on tax forms raises distributional questions that are best addressed with micro data. We use data from the 1995-2019 Survey of Consumer Finances (SCF), triennial cross-sectional household surveys with detailed information on household income, wealth, and demographics, including an oversample of affluent households.

In an accompanying paper, Gale et al. (2022), we develop a methodology for creating tax filing units from SCF household data. In this paper, we use this methodology to generate several results. First, income is higher in the SCF than in the SOI. Closely held businesses largely account for the gap and is roughly twice as large in the SCF as in the SOI data. Second, the biggest difference arises because the SOI data report large net operating losses (NOLs) in the lowest AGI class. This is consistent with a working hypothesis under which SCF respondents who own businesses report their business's economic (or financial accounting) income, which would not include NOLs, rather than the tax definition of income, which would include NOLs. Third, higher business income translates into higher simulated tax revenue in the SCF than in the SOI data for every year in our sample. Fourth, the tax-units SCF matches the number of tax returns overall and by filing status but has many fewer tax returns with negative AGI and many more very high-income tax returns. This is consistent with the idea that most of the additional business income in the SCF relative to SOI is received among households at the top of the income distribution.

Implications for Tax Policy

NIPA and SCF closely held business incomes are generally twice as large as those reported on tax returns in SOI data and most of the aggregate and distributional gaps between SCF+TAXSIM and published SOI (shown in Table 2) is attributable to differential business income measures. In this section, we report the results of a simulation—using the SCF+TAXSIM modeling capability discussed above—where we reduce business income by 50 percent for all business owners in the SCF with positive values for Schedule C and Schedule E incomes.

We use this specification as a rough approximation of what business owners report on their tax forms and we aim to measure the revenue and distributional effects of this assumption.
The purpose of the simulation is to estimate where the untaxed business income falls in the income distribution. More complicated alternatives would involve simulating business losses for a subset of business owners, and those losses might be correlated with business income or business wealth. In addition, those losses would on average necessarily be greater than 50 percent of the reported business incomes for that subset of owners. Applying a 50 percent haircut to all positive business incomes understates the distributional changes to the extent that wealthier business owners were more likely to avail themselves of loss-generating accounting practices.

Figure 3 shows that the unadjusted SCF+TAXSIM simulation (the solid red line) produces aggregate taxes that are well above published SOI values (the black line). The unadjusted SCF+TAXSIM baseline has

higher total income, most of which is accounted for by higher business incomes. Moreover, the gaps between SCF+TAXSIM and SOI tax liabilities are relatively stable over time, which is consistent with a systematic reporting difference. In the counterfactual exercise, SCF+TAXSIM aggregate tax liabilities (the red dotted line) is much closer to published SOI. The SCF is a relatively small sample, and sampling variability within the wealth-oversample affects any given year, so some volatility is expected. Still, the overwhelming impression from Figure 3 is that the reduced business income simulation aligns well with published SOI over our sample period.

Turning to distributional effects, we show the SCF+TAXSIM distributional table for tax year 2018 using the original data and counterfactual simulation, and (as with aggregate tax liability) the observed distribution comes into much better alignment with the published SOI (Table 1). The overall gap between SCF and SOI taxable income shrinks from 11 percent using the original data to just 3 percent in the counterfactual. More importantly, the distribution of the gaps between SCF+TAXSIM and SOI changes dramatically, with most of the reduced taxable income in the SCF+TAXSIM counterfactual occurring in the top AGI groups where the gaps were largest.

The simplicity of the counterfactual exercise is likely playing a role in the remaining gaps. As suggested above, the counterfactual is likely conservative in terms of distributional implications, because tax-motivated business losses are likely to play a bigger role among wealthier households. It is possible (and an important area for future research) to consider whether other counterfactuals and introducing a business loss adjustment that is correlated with business wealth will bring the distributions even closer.

Although it is a simple adjustment, the SCF+TAXSIM counterfactual is arguably a reasonable representation of our existing tax system as captured by the published SOI. We generate distributions of tax returns and taxable income that align well, and the aggregates are close. In that sense, the SCF+TAXSIM baseline is an alternative relative to the SOI baseline. Because income itself is endogenous to this exercise, we focus on the implications of the counterfactual for the distribution of taxes by wealth class. The first two columns of Table 2 provide some perspective on wealth distribution, including, for example, the fact that SCF households with net worth of $10 million or more account for 1.1 percent of the population, and own 39.1 percent of the wealth. The total wealth owned by the 35.9 percent of SCF households with net worth below $50,000 is zero—debts effectively offset positive assets for the bottom two wealth groups.

The distribution of taxes is very different. In the unadjusted SCF+TAXSIM simulation, households with wealth of $10 million or more account for 30.3 percent of taxes. In the counterfactual 50 percent business loss offset simulation—arguably much closer to our actual tax system—those same households account for only 27.6 percent of taxes. The last two columns drive the point home even more clearly. If we were to move from the income tax system we have (as captured by the SCF+TAXSIM counterfactual) to the tax system we might have if business incomes were taxed more effectively (the unadjusted SCF+TAXSIM baseline) average tax liability would jump from $287,830 to $367,145 (a 28 percent increase) for families with $10 million or more in wealth. The fact that simulated tax liabilities are little changed for households with less than $1 million in net worth drives home the point that taxing business incomes more effectively may be the key to taxing wealthy people more effectively.

Conclusion

The underlying theme of this research is that non-tax data can provide valuable information regarding income for the purposes of understanding tax policy. In particular, tax data alone provides incomplete insights about business income taxation because the income recorded in the SOI data is already affected by tax rules, avoidance strategies, and non-compliance. In conjunction with Gale et al. (2022), we show that using a tax-unit version of the SCF can provide new insights into the distributional and revenue impacts of tax policy.
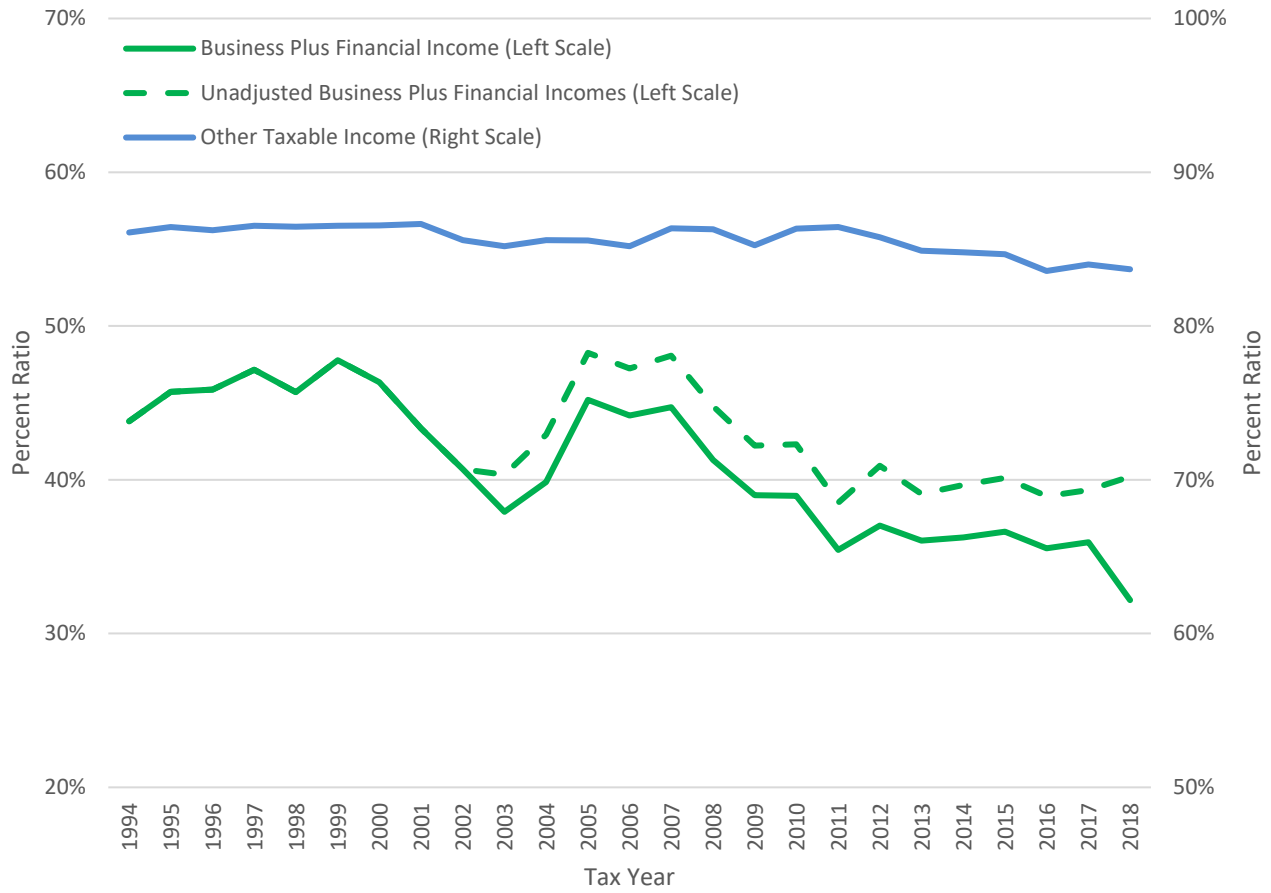
Figure 1. SOI Income Relative to NIPA

Figure 2. Gross, Negative, and Net SOI Business Income Relative to NIPA
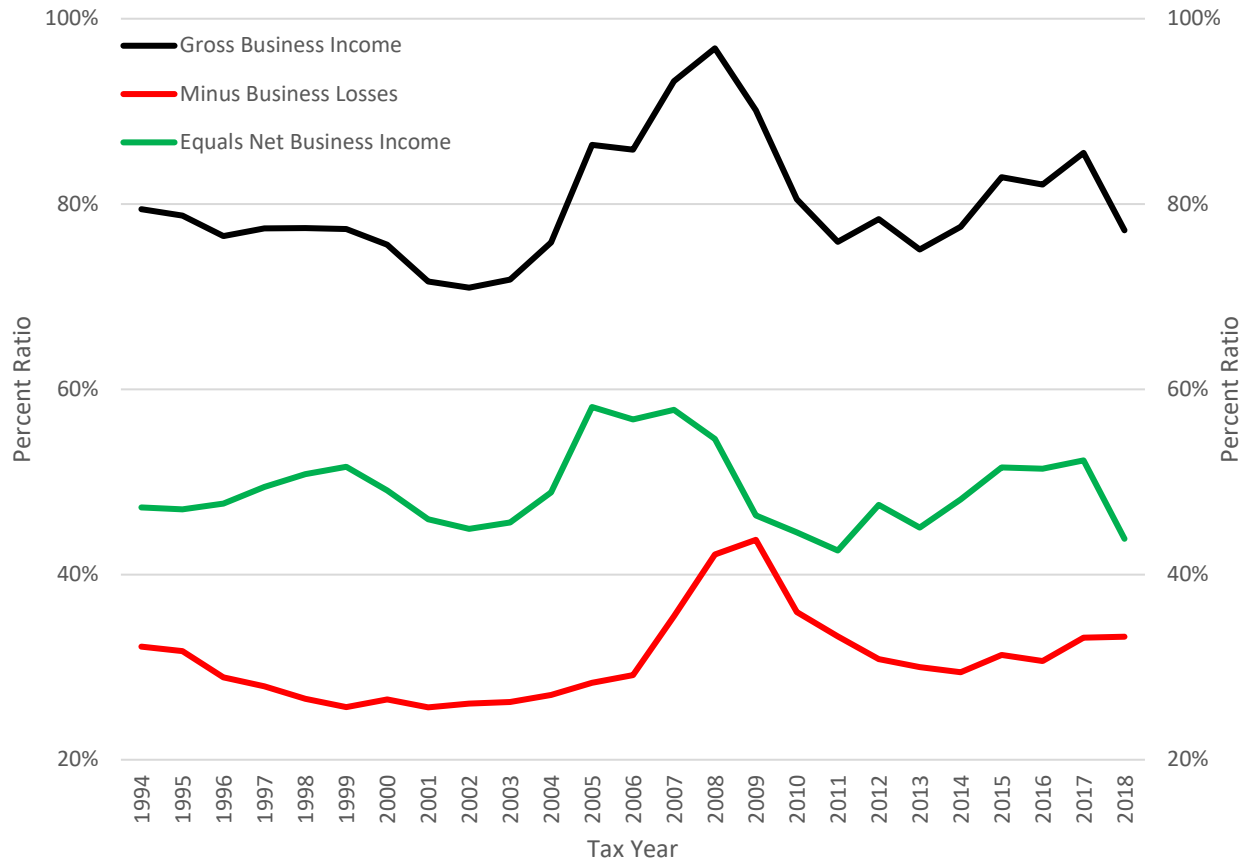
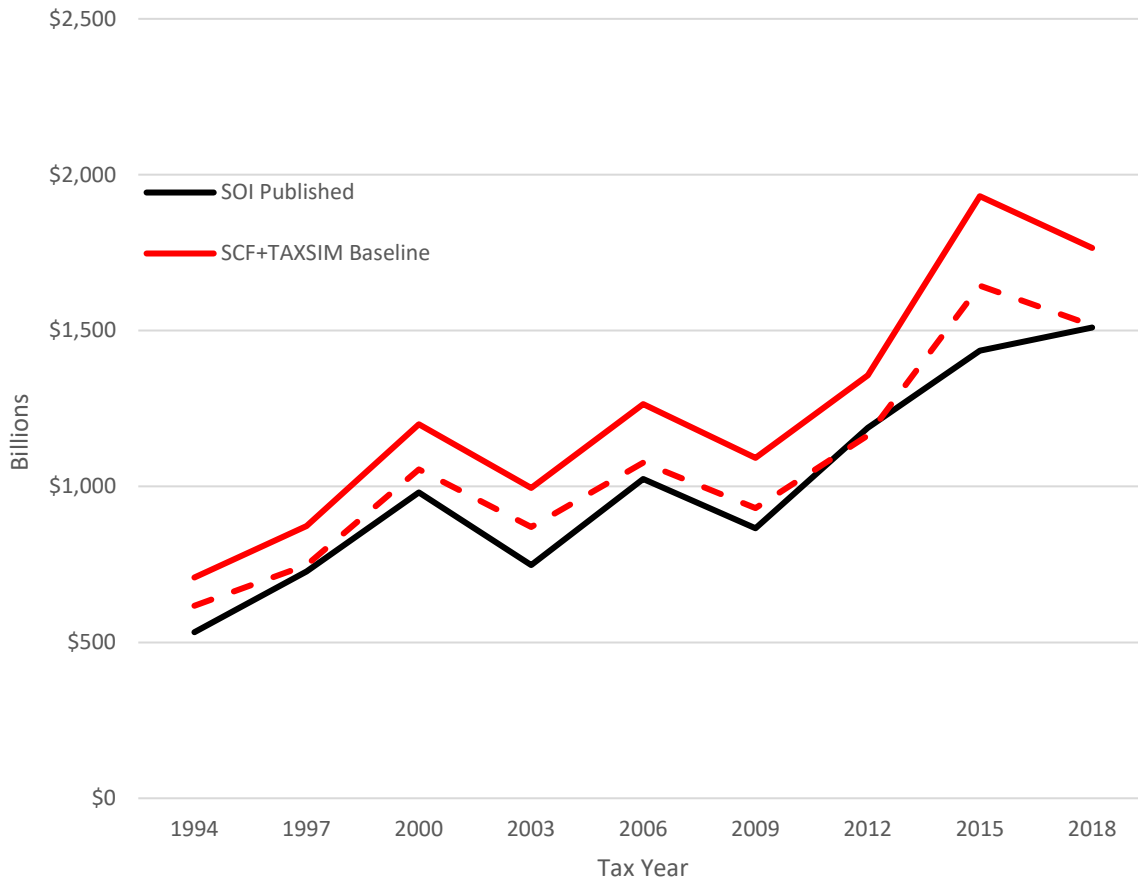## Figure 3. Aggregate Tax Liability After Credits, SOI and SCF+TAXSIM

Table 1. Simulated SCF+TAXSIM 50 Percent Business Loss Alternative, Tax Year 2018

AGI Class	Number of Returns		Total Income (Millions)	
	SCF	SOI	SCF	SOI
None	552,253	1,962,253	-21,556	-200,109
$1 to Under $25,000	40,900,270	50,453,810	503,849	647,707
$25,000 to Under $50,000	38,216,316	36,512,304	1,388,156	1,340,764
$50,000 to Under $100,000	37,105,216	35,146,085	2,657,590	2,534,215
$100,000 to Under $1,000,000	30,024,270	29,160,637	6,025,139	5,670,128
$1,000,000 or More	716,009	539,207	1,617,559	1,792,574
Total	*147,514,334*	*153,774,296*	*12,170,736*	*11,785,278*

Table 2. Distributional Effects of Differential Business Income Reporting, Tax Year 2018

Wealth Class	Distribution by Wealth Class				Average Taxes	
	Households	Wealth	Taxes: Unadjusted SCF	Taxes: 50 Percent Business Loss	Unadjusted SCF	50 Percent Business Loss
Less Than $25,000	30.3%	-0.3%	2.3%	2.5%	$1,033	$978
$25,000 to <$50,000	5.6%	0.3%	1.1%	1.2%	$2,677	$2,567
$50,000 to <$100,000	11.0%	1.1%	3.0%	3.3%	$3,735	$3,582
$100,000 to <$500,000	31.6%	10.5%	15.3%	16.6%	$6,655	$6,192
$500,000 to <$1,000,000	9.6%	9.3%	10.3%	11.3%	$14,720	$13,844
$1,000,000 to <$5,000,000	9.1%	24.9%	23.0%	23.5%	$34,665	$30,441
$5,000,000 to <$10,000,000	1.7%	15.3%	14.7%	13.9%	$121,881	$98,995
$10,000,000 or More	1.1%	39.1%	30.3%	27.6%	$367,145	$287,830
All	*100.0%*	*100.0%*	*100.0%*	*100.0%*	*$13,725*	*$11,793*

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